CLAIMS

What is claimed is:

1. An appliance integrated biometric security system comprising:

an electronic appliance; and

an integrated biometric security system including a CMOS image sensor, a signal processor, and non-volatile memory.

2. An appliance integrated biometric security system as defined in claim 1 wherein the signal processor is selected from the group consisting of: a microprocessor; and a digital signal processor.

3. An appliance integrated biometric security system as defined in claim 1 wherein the non-volatile memory is a programmable read only memory.

4. An appliance integrated biometric security system as defined in claim 1 wherein the electronic appliance is selected from the group consisting of: a cell-phone; a pager; a personal-digital-assistant; a laptop computer; and a digital camera.

5. An appliance integrated biometric security system as defined in claim 1 wherein the non-volatile memory is selected from the group consisting of: electrically erasable programmable read only memory; flash memory; and programmable read only memory.

6. An appliance integrated biometric security system as defined in claim 1 further including an input/output section for programming the non-volatile memory and for communicating with the electronic appliance.

7. An appliance integrated biometric security system as defined in claim 1 wherein the non-volatile memory is used to store a template that identifies an individual authorized to access the electronic appliance.

8. An appliance integrated biometric security system as defined in claim 1 wherein the non-volatile memory is used to store a plurality of templates, each one of the plurality of templates identifying an individual authorized to access the electronic appliance.

9. An appliance integrated biometric security system as defined in claim 8 wherein the non-volatile memory stores a pixel defect map.

10. An appliance integrated biometric security system as defined in claim 1 wherein the CMOS image sensor consists of:

a CMOS camera chip;

a pair of light emitting diodes;

a lens;

a transparent window; and

an actuateable switch for activating the CMOS camera chip and the light emitting diodes.

11. An appliance integrated biometric security system as defined in claim 10 wherein the actuateable switch is an electro-mechanical switch.

12. An appliance integrated biometric security system as defined in claim 10 wherein the actuateable switch is a capacitive switch.

13. An appliance integrated biometric security system comprising:

a portable, personal electronic appliance having functional hardware; and

an integrated biometric security system for authenticating an authorized user of the appliance, including:

a CMOS image sensor for capturing raw image data of a physiological characteristic of a candidate user;

non-volatile memory for storing a template that identifies the authorized user; and

a microprocessor for extracting a feature set from the raw image data, for comparing the feature set to the template and directing the biometric security system to allow access to the functional hardware of the appliance if the feature set is substantially similar to the template.